# K-12 Teachers-Impact of Having a Graduate Degree

#### Program description:

This analysis examines the impact on student test scores from having a teacher with a graduate degree, versus having a teacher without a graduate degree. On average, we find no difference in test scores for teachers with and without a graduate degree.

Typical age of primary program participant: N/A

Typical age of secondary program participant: N/A

**Meta-Analysis of Program Effects** 

Outcomes Measured	Primary or Second-ary Partici-pant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
	•				First time ES is estimated			Second time ES is estimated			
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Test scores	Р	29	0.00	0.00	0.00	0.00	0.00	11	0.00	0.00	17

Benefits and costs were not estimated.

### Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier		
1- Less well-implemented comparison group or observational study, with some covariates.	1.00		
2- Well-implemented comparison group design, often with many statistical controls.	1.00		
3- Well-done observational study with many statistical controls (e.g., instrumental variables).	1.00		
4- Random assignment, with some implementation issues.	1.00		
5- Well-done random assignment study.	1.00		
Program developer = researcher	0.5		
Unusual (not "real-world") setting	0.5		
Weak measurement used	0.5		

# Studies Used in the Meta-Analysis

- Archibald, S. (2006). Narrowing in on educational resources that do affect student achievement. Peabody Journal of Education, 81(4), 23-42.
- Buddin, R., & Zamarro, G. (2009, June). Teacher qualifications and middle school student achievement (Working Paper WR-671-IES). Santa Monica, CA: RAND.
- Buddin, R., & Zamarro, G. (2009). Teacher qualifications and student achievement in urban elementary schools. *Journal of Urban Economics* 66(2), 103-115.
- Cavalluzzo, L. C. (2004, November). Is national board certification an effective signal of teacher quality? Alexandria, VA: The CNA Corporation.
- Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics of Education Review*, 30(3), 449-465.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2006). Teacher-student matching and the assessment of teacher effectiveness. *The Journal of Human Resources*, 41(4), 778-820.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26(6), 673-682.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2010). Teacher credentials and student achievement in high school: A cross-subject analysis with student fixed effects. *Journal of Human Resources*, 45(3), 655-681.
- Corcoran, S. P., Jennings, J. L., & Beveridge, A. A. (2011, April). *Teacher effectiveness on high- and low-stakes tests*. Unpublished manuscript, New York University.
- Croninger, R. G., Rice, J. K., Rathbun, A., & Nishio, M. (2007). Teacher qualifications and early learning: Effects of certification, degree, and experience on first-grade student achievement. *Economics of Education Review, 26*(3), 312-324.
- Goldhaber, D., & Anthony, E. (2007). Can teacher quality be effectively assessed? National board certification as a signal of effective teaching. *The Review of Economics and Statistics*, 89(1), 134-150.
- Goldhaber, D. D., & Brewer, D. J. (1996). Evaluating the effect of teacher degree level on educational performance. In W. J. Fowler, Jr. (Ed.), Developments in school finance, 1996: Fiscal proceedings from the Annual NCES State Data Conference (pp. 197-210). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Goldhaber, D. D., & Brewer, D. J. (1997). Why don't schools and teachers seem to matter? Assessing the impact of unobservables on educational productivity. *The Journal of Human Resources*, 32(3), 505-523.
- Goldhaber, D. D., & Brewer, D. J. (2000). Does teacher certification matter? High school teacher certification status and student achievement. Educational Evaluation and Policy Analysis, 22(2), 129-145.

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- Goldhaber, D. D., Brewer, D. J., & Anderson, D. J. (1999). A three-way components analysis of educational productivity. *Education Economics*, 7(3), 199-208.
- Hanushek, E. A. (1992). The trade-off between child quantity and quality. Journal of Political Economy, 100(1), 84-117.
- Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. Journal of Public Economics, 95(7-8), 798-812.
- Huang, F. L., & Moon, T. R. (2009). Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. *Educational Assessment, Evaluation and Accountability*, 21(3), 209-234.
- Jacob, B. A., & Lefgren, L. (2008). Can principals identify effective teachers? Evidence on subjective performance evaluation in education. *Journal of Labor Economics*, 26(1), 101-136.
- Koedel, C., & Betts, J. R. (2007, April). Re-examining the role of teacher quality in the educational production function. Unpublished manuscript, University of Missouri-Columbia, Department of Economics.
- Krieg, J. M. (2006). Teacher quality and attrition. Economics of Education Review, 25(1), 13-27.
- Krueger, A. B. (1999). Experimental estimates of education production functions. The Quarterly Journal of Economics, 114(2), 497-532.
- Ladd, H. F., Sass, T. R., & Harris, D. N. (2007, February). The impact of national board certified teachers on student achievement in Florida and North Carolina: A summary of the evidence prepared for the National Academies Committee on the evaluation of the impact of teacher certification by NBPTS. Unpublished manuscript.
- Leak, J. A., & Farkas, G. (2011). Effects of teacher credentials, coursework, and certification on student achievement in math and reading in kindergarten: An ECLS-K study. Evanston, IL: Society for Research on Educational Effectiveness.
- Leigh, A. K. (2010). Estimating teacher effectiveness from two-year changes in students' test scores. Economics of Education Review, 29(3), 480-488.
- Rockoff, J. E., Jacob, B. A., Kane, T. J., & Staiger, D. O. (2011). Can you recognize an effective teacher when you recruit one? *Education Finance and Policy*, 6(1), 43-74.